

Introduction

This web page is for the online national survey of Health Information Technology (HIT) in Nursing Homes. The survey is being conducted by the University of Pittsburgh Department of Health Policy and Management. We are surveying Advance Practitioners, Certified Nurse Assistants, Consulting Pharmacists, Directors of Nursing, Nursing Home Administrators, and Medical Directors. The questions in the survey were developed using focus groups with representatives of each profession. Each group was asked about care processes that could benefit from HIT. Each participant also rated the importance of each issue. The information from these groups was reviewed and combined to produce a survey that addresses a broad range of uses for HIT.

Your answers will provide a national snapshot of the availability and use of HIT in nursing homes. The results will be used to help improve the quality of care in nursing homes by providing information to HIT vendors to improve their products as well as to policy makers and other stakeholders.

If you are interrupted, you may re-start the survey and continue where you left off. This will only work if you are using the same computer; otherwise you will have to start over. *If more than one person needs to use the same computer to take the survey, please email Abby Resnick aresnick@pitt.edu or call (412) 647-5783 for assistance.*

Your answers to this survey will be kept confidential. Your name will not appear in any publications. Neither will the names of any nursing homes.

After you complete the survey, you will be given instructions to activate the value on the gift card you received in the mail with the invitation for this survey. You will have an opportunity to request a copy of the results. If you have any questions, problems with the survey or if you did not receive a gift card, please contact the study coordinator, Abby Resnick, aresnick@pitt.edu or telephone (412) 647-5783.

Please enter the Survey ID number written on the letter you received. This will allow us to track the completion of the study. [LEAVE BLANK IF YOU ARE PILOT TESTING]

Survey ID:

Instructions

Please answer all of the questions to the best of your knowledge. The questions are about the Availability and Use of Health Information Technology (HIT) in the nursing home. Your answers should reflect your knowledge and understanding of how HIT is used in the facility where you work.

If you work at more than one facility, please answer with regard to the nursing home where you see the most residents.

Quality Improvement

Quality Improvement is an on-going interdisciplinary process designed to improve the delivery of preventive, diagnostic, therapeutic, and rehabilitative measures in order to maintain, restore and improve health outcomes of individuals and populations.

Risk. An HIT system can help identify whether individual residents have a higher probability of experiencing a particular condition.

How often do you use HIT to help identify residents at risk of the following events:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
New or recurrent <u>infection</u> (e.g., UTI, respiratory, catheter associated, nosocomial)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New or recurrent <u>Pressure Sore</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New or recurrent <u>Fall</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor <u>nutritional</u> status (e.g., weight loss, dehydration)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Vaccination</u> Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Mood or behavioral</u> problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in <u>physical</u> <u>function</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in <u>cognitive</u> <u>function</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical restraint use*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Physical Restraints: If the feature is available but not used because your facility is 'restraint free' please answer "not used at all." There will be a section at the end regarding facility policies.

Trending. A HI T system can be used to automatically calculate the proportion of residents with a particular condition over time. For example: "5 out of 100, or 5% , of residents have a pressure ulcer."

How often do you use HI T to automatically identify trends in the rates of:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
New or recurrent <u>infection</u> (e.g., UTI, respiratory, catheter associated, nosocomial)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New or recurrent <u>Pressure Sore</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New or recurrent <u>Fall</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor <u>nutritional</u> status (e.g., weight loss, dehydration)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Vaccination</u> Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Mood or behavioral</u> problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in <u>physical</u> <u>function</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in <u>cognitive</u> <u>function</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical restraint use*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Physical Restraints: If the feature is available but not used because your facility is 'restraint free' please answer "not used at all." There will be a section at the end regarding facility policies.

Alerts and Reminders. An HIT system can provide up to the minute alerts or reminders about changes in resident health status. This could be an email message or warning when someone logs on to the system.

How often do you use HIT that can provide real-time alerts or reminders about the status of the following:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
New or recurrent <u>infection</u> (e.g., UTI, respiratory, catheter associated, nosocomial)	jñ	jñ	jñ	jñ	jñ	jñ	jñ
New or recurrent <u>Pressure Sore</u>	jñ	jñ	jñ	jñ	jñ	jñ	jñ
New or recurrent <u>Fall</u>	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Poor <u>nutritional</u> status (e.g., weight loss, dehydration)	jñ	jñ	jñ	jñ	jñ	jñ	jñ
<u>Vaccination</u> Status	jñ	jñ	jñ	jñ	jñ	jñ	jñ
<u>Mood or behavioral</u> problems	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Changes in <u>physical function</u>	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Changes in <u>cognitive function</u>	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Physical restraint use*	jñ	jñ	jñ	jñ	jñ	jñ	jñ

*Physical Restraints: If the feature is available but not used because your facility is 'restraint free' please answer "not used at all." There will be a section at the end regarding facility policies.

Alerts and Reminders. An HIT system can generate alerts or reminders to inform clinicians about time-sensitive actions.

How often do you use HIT to generates alerts or reminders when any of the following are available:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Laboratory test results	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Radiology test results	jñ	jñ	jñ	jñ	jñ	jñ	jñ
New verbal orders	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Medication recaps needs to be signed	jñ	jñ	jñ	jñ	jñ	jñ	jñ

Staff Communication

Hand-off communication is defined by The Joint Commission as a process(es) to provide accurate and up-to-date information about a patient's care, treatment, services, current condition and any recent or anticipated changes. The information communicated during a hand-off must be accurate in order to meet clinical goals.

Cross-Covering Clinician. A cross-covering clinician temporarily provides care for a patient while another clinician is unavailable (e.g., on call, attending a medical conference, or on vacation).

How often do you use a HIT system to generate the following types of messages:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
A list of relevant clinical and non-clinical information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generation of a list of tasks to be completed by a cross-covering clinician	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A rounding report for physicians or advanced practitioners that summarizes pertinent clinical information (e.g., medications, allergies, recent laboratory tests, physiological data, bowel and bladder status)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change-of-shift reports for nursing staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Change of shift reports for nurse aides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Structured Clinical Documentation

Structured clinical documentation refers to a system that facilitates collection, organization, and retrieval of clinical and/or administrative data.

How often do you use HIT to ensure adequate structured clinical documentation of the following:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
New or recurrent <u>infection</u> (e.g., UTI, respiratory, catheter associated, nosocomial)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New or recurrent <u>Pressure Sore</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New or recurrent <u>Fall</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor <u>nutritional</u> status (e.g., weight loss, dehydration)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Vaccination</u> Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Mood or behavioral</u> problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in <u>physical</u> <u>function</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes in <u>cognitive</u> <u>function</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physical restraint use*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Physical Restraints: If the feature is available but not used because your facility is 'restraint free' please answer "not used at all." There will be a section at the end regarding facility policies.

How often do you use HIT to identify:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Orders contrary to residents advance directives, treatment preferences, or care plan goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When families need to be educated or informed of changes in resident status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do you use HIT for point-of-care (i.e., at or near the resident's bedside) charting of the following:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Performance of activities of daily living	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Bowel and bladder function	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Meals and or liquids consumed	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Mobility	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Ability to transfer	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Participation in activities	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Physiological information (e.g., blood pressure, pulse, respiratory rate)	jñ	jñ	jñ	jñ	jñ	jñ	jñ

Medication Use Process

The medication use process refers to prescribing, order communication, dispensing, administering, monitoring and reconciliation of medications.

Prescribing and Order communication. Do you have an electronic system for prescribing and order communication with the following features:

	Yes	No	Don't Know
Computer-based process to communicate medication orders from the nursing home to the pharmacy (i.e., electronic prescribing) without relying on verbal or faxed orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Documentation of an indication(s) for each prescribed medication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standardized orders for clinical monitoring (e.g., laboratory tests, response to medication treatments)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatically generate cut-date reminders for antibiotics and other non-chronic medications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remote access by physicians to current active medication list or medication administration record	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remote access by pharmacists to current active medication list or medication administration record	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Medication Administration. Do you have an electronic system to document medication administration with the following features:

	Yes	No	Don't Know
A way to positively identify residents (e.g., photograph, biometric, barcode or radio-frequency identification (RFID))	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A way to allow users to document patient refusal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A way to allow users to document medication errors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to assist in identifying adverse drug events, allergic reactions or other side effects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Monitoring. Do you have an HIT system for monitoring drug therapy with any of the following features:

	Yes	No	Don't Know
Integration with laboratory data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic generation of warnings about potential adverse drug events (allergic reactions, drug-drug interactions, or drug-disease interactions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic generation of warnings about required laboratory tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic generation of reminders about upcoming prescription renewals that may be needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)			
<input type="text"/>			

Reconciliation, Recap and Dispensing. Do you have an HIT system that that supports the following:

	Yes	No	Don't Know
<u>Medication Reconciliation.</u> Do you have an HIT system that automates the medication reconciliation process?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Medication Recap.</u> Do you have an HIT system that automates the medication recap process?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Medication Dispensing.</u> Do you have an on-site automated medication dispensing system?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Data Transfer

Data Transfer is the process of sending and receiving recorded information to or from other health care settings such as hospitals or physician's offices or other long-term care facilities.

How often do you use an electronic, computer-to-computer connection (do not count fax, email or telephone) to send or receive the following types of clinical information:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Physical Function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cognitive Function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diagnoses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medication List	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vital Signs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

How often do you use HIT to electronically receive clinical information from the following providers at the time of nursing home admission:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Hospitals?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physician's offices?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other nursing homes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Home care?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rehab facilities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

How often do you use HIT to electronically send clinical information and orders upon discharge or transfer to:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Hospitals?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physician's offices?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other long-term care facilities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Home care?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rehab facilities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Regulatory Compliance

Regulatory Compliance refers to systems for ensuring local, state and federal mandates are being followed within appropriate time frames.

Do you have a HI T system that automatically generates the required data and reports during your state's annual survey (e.g., Department of Health)?

☐ Yes

☐ No

☐ Don't Know

How often do you have an HI T system to generate reminders for the following deadlines:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Signing of verbal nursing orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-signing of advance-practitioner (i.e., nurse practitioner or physician assistant) orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seeing patients for regulatory visits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medication recap lists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do you use an HI T system that supports the ability of clinicians to electronically review and acknowledge (i.e., sign-off on or order additional tests) the following:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Laboratory reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiology reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medication recap list	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Signing of verbal nursing orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Co-signing of advance-practitioner (i.e., nurse practitioner or physician assistant) orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Operations

Operations are the processes that support and coordinate various activities necessary to deliver services and sustain the organization.

How often do you use HIT to manage the following functions related to insurance:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Verification of insurance coverage	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Authorization of medication orders	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Authorization of covered Days	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Authorization of diagnostic tests	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Integration of medication orders with residents' formulary	jñ	jñ	jñ	jñ	jñ	jñ	jñ

How often do you use HIT for the following tasks related to inventory management:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Tracking orders for medical supplies	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Tracking location of supplies	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Tracking location of equipment	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Updating inventory based on clinical orders	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Management of residents' personal property	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Rental of durable medical equipment	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Reminders for periodic service/maintenance of durable medical equipment	jñ	jñ	jñ	jñ	jñ	jñ	jñ

How often do you use HI T for the following planning functions:

	Do not have feature	All of the time	Most of the time	Some of the time	Rarely	Not used at all	Don't Know
Analyze staffing needs based on resident census?	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Monitor resident acuity	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Monitor the delivery of therapy services for billing purposes	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Monitor case management progress related to discharge?	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Monitor resident nutritional status	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Integrate resident meal preferences with food service preparation?	jñ	jñ	jñ	jñ	jñ	jñ	jñ
Integrate resident meal preferences with food delivery?	jñ	jñ	jñ	jñ	jñ	jñ	jñ

Adoption and Implementation of Health Information Technology

The following statements are related to your nursing home's experience with selecting and implementing health information technology (HIT). Please answer to the best of your knowledge.

Direct care staff is defined in this context as health care personnel who provide care to residents and do not have management responsibilities.

Administrators are defined in this context as people with management or administrative responsibilities who do not provide care to residents more than 50% of the time.

Which of the following statements best characterizes the overall stage of HIT adoption in your facility?

☐ Non-Adoption: our nursing home is in the process of identifying important problems in our facility and is considering only non-HIT solutions to those problems.

☐ Agenda-setting: our nursing home is in the process of identifying important problems in our facility and searching for HIT-related solutions to these problems.

☐ Matching: our nursing home is searching for a match between our HIT needs and what is available from HIT vendors.

☐ Restructuring: our nursing home is engaged in redesigning workflow and modifying roles and routines to accommodate and use the HIT solutions we have purchased.

☐ Clarifying: our nursing home is reviewing our experiences with our HIT solutions, and we are trying to decide which features work and which features should be abandoned.

☐ Routinizing: our nursing home has selected particular HIT solutions that will be used routinely for the foreseeable future, and we are attempting to secure financial and social support for their continued use.

With respect to your nursing home's current HIT-initiatives related to clinical care processes, how would you characterize these developments?

☐ Administrators have been the primary driver behind the adoption of HIT solutions for problems related to clinical care processes.

☐ Administrators and direct care staff have had an equal role in the adoption of HIT initiatives to improve clinical care processes.

☐ Direct care staff has played the largest role in the adoption of HIT solutions to clinical care problems.

Change Management

With respect to your nursing home's current HIT-initiatives, please characterize how administration has managed the adoption and implementation using the following techniques to manage change.

Senior leadership is defined as the supervisory staff members who make important administrative and/or clinical decisions, including the Nursing Home Administrator, the Medical Director, and the Director of Nursing.

How frequently does senior leadership refer to each of the following in formal communication (e.g., written reports, strategic plans, formal recognition or awards, public interviews or communication):

	1 Never	2	3	4	5 Frequently
refer to the urgency of addressing performance gaps between your nursing home and its <u>competitors</u> using HIT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
articulate a vision of how the nursing home will operate in the <u>future</u> using HIT.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
created short term "wins" to build momentum and <u>generate commitment</u> to the change efforts surrounding HIT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How frequently does senior leadership do each of the following:

	1 Never	2	3	4	5 Frequently
Refer to the benefits of HIT to facilitate teamwork and coordinate employee efforts	jñ	jñ	jñ	jñ	jñ
Refer to the benefits of HIT to increase compliance with existing regulations.	jñ	jñ	jñ	jñ	jñ
Refer to the benefits of HIT to prepare for future or pending regulations.	jñ	jñ	jñ	jñ	jñ
participate in HIT <u>training sessions</u> with direct care workers.	jñ	jñ	jñ	jñ	jñ
make a concerted effort to ensure that <u>direct care workers</u> have dedicated time to learn how to use the HIT that has been purchased.	jñ	jñ	jñ	jñ	jñ
identifies both the strengths and weaknesses of the HIT we have purchased.	jñ	jñ	jñ	jñ	jñ

Which of the following describes how your nursing home selected an HIT vendor [CHECK ALL THAT APPLY]

- ☐ Vendor demonstration at your facility
- ☐ Telephone conference call
- ☐ Reviewed magazine
- ☐ Attended a webinar
- ☐ Saw vendor at conference
- ☐ Site visit to see product at another facility
- ☐ Recommendations from peers or colleagues at another facility

Other (please specify)

Change Management (Continued)

Which of the following accurately characterizes how your nursing home tests new HIT solutions?

- ☐ We test HIT solutions across the entire organization at once
- ☐ We test HIT solutions in only a subset of the entire organization

Which of the following *most accurately* characterizes your nursing home regarding whether it contracts with / brings in experts to manage the implementation of health HIT.

- ☐ We rely on the HIT vendors to provide the technical support for our implementation efforts
- ☐ We rely on consultants or experts to provide the technical support for our implementation efforts
- ☐ We use mostly trial-and-error and our own staff members to figure out the HIT

Which of the following most accurately describes the primary way that staff receives technical support?

- ☐ We depend upon on-site technical support
- ☐ We depend upon telephone-based technical support
- ☐ We depend upon internet-based (World Wide Web and email) technical support

Which of the following most accurately characterizes how employees learn how to use HIT solutions? [CHECK ALL THAT APPLY]

- ☐ We rely on a train-the-trainer approach: select staff members are trained and they mentor others
- ☐ We use a clinician champion approach: one person is identified as the champion who takes the lead for the project
- ☐ We rely on an all-at-once approach: a trainer provides instruction to all / the majority of staff
- ☐ We use computer based e-learning
- ☐ We send employees off-site to receive training

How does your facility typically make changes to workflow related to implementing HIT?

- ☐ Top-down: decisions are made by administrators about new workflow and changes must be endorsed
- ☐ Shared: decision making is shared between administrators and direct care staff with both groups agreeing on proposed changes
- ☐ Bottom-Up: direct care staff can make changes without prior approval from managers or administration

How would you best describe your nursing facility' experience with changes to workflow related to implementing HIT:

- ☐ Careful experimentation
- ☐ Extensive planning prior to implementation
- ☐ Trial and error

Barriers to Change

The following statements pertain to possible barriers to the adoption of particular HIT solutions for clinical care problems. To the best of your knowledge regarding which factors will pose a barrier in your nursing home, please rate each of the following statements based on how strongly you agree or disagree with each one.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Senior leadership does not support investments in HIT products unless it is clear that there will be a positive financial return on the investment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior leadership does not support investments in HIT products unless it is clear that they will be compatible with current and/or pending regulations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior leadership does not support investments in HIT products unless it is clear that the particular products are the best application on the market.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is often conflict among staff for the selection of particular HIT products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Core members of the clinical staff are uncomfortable relying on HIT products for documenting and determining care processes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Core members of the clinical staff are reluctant to alter their roles and routines to accommodate new HIT.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Core members of the clinical staff are worried that new HIT will cause them to lose status among nursing home staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct care staff members are reluctant to abandon traditional methods of information management (e.g., paper records).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct care staff members are hesitant to learn new HIT because they have limited experience with computers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees are reluctant to learn new HIT unless they are paid during training.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our facility has a <u>hard time</u> affording the cost of training sessions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our facility has a <u>hard time</u> scheduling training sessions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees are reluctant to adopt new HIT because they fear that they will be asked to do more work with fewer support staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees are reluctant to adopt new HIT because they fear that it will disrupt the relationships with residents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our facility relies on <u>agency staff</u> who frequently have difficulty using our HIT solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our facility has <u>high levels of turnover</u> that necessitates excessive amounts of training to use our HIT system.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographics

Please select your primary role:

- ☐ Advanced Practitioner
- ☐ Certified Nurse Assistant
- ☐ Director of Nursing
- ☐ Nursing Home Administrator
- ☐ Pharmacist
- ☐ Physician
- ☐ Unit Manager/Charge Nurse

Certified Nursing Assistant (CNA)

Please check off your highest level of education:

☐ High School Diploma/GED

☐ Associates Degree

Other (please specify)

Are you a certified nursing assistant?

☐ Yes

☐ No

Nursing Background

Please check all training you have attained:

- ☐ LPN
- ☐ RN
- ☐ BSN
- ☐ MSN
- ☐ PhD-Nursing
- ☐ CRNP
- ☐ PA-C

Other (please specify)

Please select any specialty training or certification you hold:

- ☐ Geriatric Nurse Practitioner
- ☐ Gerontological Nurse
- ☐ Nursing Administration
- ☐ Certified Hospice and Palliative Care Nurse

Other (please specify)

Pharmacist

Please describe the setting where you have primary dispensing responsibilities:

☐ No Dispensing Responsibilities

☐ Nursing Home

☐ Hospital

☐ Community

Other (please specify)

Please describe any other responsibilities you have besides Consulting, Dispensing and Administrative.

Please enter the percentage (0-100) of your time spent in the each of the following tasks:

Consultant

Dispensing

Administrative

Other

Please indicate your highest of training:

☐ BS Pharmacy

☐ PharmD

Other (please specify)

Please indicate residencies you have completed and current certifications:

☐ Pharmacy Practice

☐ Gerontological Pharmacy Practice

☐ BCPS

☐ CGP

Other (please specify)

Physician

Indicate type of medical training:

☐ MD

☐ DO

Please check all specialty and fellowships you have completed:

☐ Internal Medicine

☐ CAQ

☐ Family Practice

☐ CMD

☐ Geriatrics Fellowship

Other (please specify)

Are you a Medical Director?

☐ Yes

☐ No

At the facility where you work (or spend most of your time), what proportion of residents are under your care?

☐ < 25

☐ 25 to 49

☐ 50 to 75

☐ > 75

Nursing Home Administrator

Please check all degrees you have attained:

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> LPN | <input type="checkbox"/> CRP |
| <input type="checkbox"/> BA/BS in business | <input type="checkbox"/> RN | <input type="checkbox"/> PA-C |
| <input type="checkbox"/> BA/BS non-business | <input type="checkbox"/> BSN | <input type="checkbox"/> JD |
| <input type="checkbox"/> MHA | <input type="checkbox"/> MSN | <input type="checkbox"/> MD or DO |
| <input type="checkbox"/> MBA | <input type="checkbox"/> PhD - Nursing | |

Other (please specify)

Please indicate any business certifications you hold:

- ☐ CPA
- ☐ CFA

Other (please specify)

Please indicate all nursing certifications you hold:

- ☐ Geriatric Nurse Practitioner
- ☐ Gerontological Nurse
- ☐ Nursing Administration
- ☐ Certified Hospice and Palliative Care Nurse

Other (please specify)

Please check all Medical specialty and fellowships you have completed:

- ☐ Internal Medicine
- ☐ Family Practice
- ☐ Geriatrics Fellowship
- ☐ CAQ

Other (please specify)

Demographics (Continued)

Please indicate the number of years:

	< 1 year	1-5 years	6-10 years	11-15 years	16-20 years	> 20 years
Since completing your training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That you have been working in any nursing home setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
That you have been working at this particular nursing home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is your gender?

☐ Male

☐ Female

Please indicate your race/ethnicity (check all that apply):

☐ White (Caucasian)

☐ African American

☐ Hispanic

☐ Asian/Pacific Islander

☐ South Asian (India, Pakistan)

Other (please specify)

About Your Facility

The next questions are about the facility where you work, or if you work at more than one facility, the place where you see the most residents.

What state is your facility located in?

State:

Number of Beds:

☐ < 50

☐ 50 - 99

☐ 100-150

☐ 151-200

☐ > 200

Ownership:

☐ For-Profit

☐ Non-Profit

☐ Government

Affiliation:

☐ Chain/Multi-facility

☐ Independent/Free-Standing

☐ Hospital-affiliated

Is your facility faith-based, owned by or affiliated with a religious order?

☐ Yes

☐ No

Is your facility located in an area that is:

☐ Urban

☐ Suburban

☐ Rural

Comments

Please use the space below to provide any comments you might have about the survey or about HIT in general.

Facility Policies

Does your facility have any of the following policies:

	Yes	No	Don't Know
Is your facility a 'physical restraint free' facility?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does your facility consider itself to be part of the 'culture change' or 'Pioneer Movement'?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does your facility use the POLST form (Physicians Orders for Life Sustaining Treatment) for end of life advance care planning?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does your facility use a different form for advance care planning?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Does your facility use a standardized approach (e.g., a clinical protocol, critical pathway, clinical practice guidelines or evidence based best practices) for any of the following conditions:

	Yes	No	Don't Know
Skin care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pain management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Falls assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infection control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Depression or Mood Disorders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vaccinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nutrition management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Declines in physical function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Contact Information

This survey is confidential. Your name only appears in a separate mailing list that is not linked with the survey.

If you would like to receive a copy of the survey results, you may choose to fill in the following form.

PILOT TESTERS: USE THIS SECTION TO PROVIDE THE NAME AND ADDRESS FOR YOUR THANK YOU GIFT CARD.

If you would like to receive a copy of the results of this study, please use the spaces below to enter permanent contact information. You may use your work or personal address. This information will be used to send you a copy of aggregated research findings.

Name:	<input type="text"/>
Company:	<input type="text"/>
Address:	<input type="text"/>
Address 2:	<input type="text"/>
City/Town:	<input type="text"/>
State:	<input type="text"/>
ZIP/Postal Code:	<input type="text"/>
Country:	<input type="text"/>
Email Address:	<input type="text"/>
Phone Number:	<input type="text"/>

We are planning for future studies of the nursing home industry, including, for example, case studies related to adoption of health information technology. Are you interested in being contacted for future studies?

☐ Yes

☐ No

Thank You Gift

Thank you for completing the survey. In the spaces provided below, please enter the sixteen digit Cash Card number on the University of Pittsburgh MasterCard debit card you received in the mail along with a 4-digit PIN number of your own choosing. Select a PIN that is easy for you to remember but may be difficult for someone else to guess and store it in a safe location. Your card will be activated within three business days and you will be able to use it as a debit card. Further instructions are provided in the pamphlet you received in the mail.

If you have any questions please call Abby Resnick at 412-647-5783 or email Abby at aresnick@pitt.edu.

Thank you for your participation in our survey.

Please enter the 16 digit Cash Card number: ENTER YOUR NAME IF YOU
ARE A PILOT TESTER

Please select a 4 digit PIN number:

Pilot Testing Comments

Please use the space below to give us feedback on the survey. Please feel free to comment on any aspect of the survey including: content, wording, colors, spacing, or length.

Thank you again for your time & effort to support this project.

